What is claimed is:

1. A semiconductor light emitting device comprising:

an ultraviolet ray light emitting element;

a blue color converting layer containing a blue color light emitting fluorescent material that is excited by ultraviolet rays and emits blue light;

a green color converting layer containing a green color light emitting fluorescent material that is excited by ultraviolet rays and emits green light; and

a red color converting layer containing a red color light emitting fluorescent material that is excited by ultraviolet rays and emits red light,

wherein the blue color converting layer, the green color converting layer and the red color converting layer are stacked on the ultraviolet ray light emitting element in this order.

2. The semiconductor light emitting device according to claim 1, wherein average particle sizes of the fluorescent materials are made greater in the order of the blue color light emitting fluorescent material, the green color light emitting fluorescent material and the red color light emitting fluorescent material.

3. The semiconductor light emitting device according to claim 1, wherein the red color light emitting fluorescent material has an average particle size in a range from 30 to 50 μm.

4. The semiconductor light emitting device according

to claim 3, wherein the green color light emitting fluorescent material has an average particle size in a range from 10 to 20 μm.

5. The semiconductor light emitting device according to claim 4, wherein the blue color light emitting fluorescent material has an average particle size in a range from 1 to 5 μm.

6. The semiconductor light emitting device according to claim 1, wherein the ultraviolet ray light emitting element has substantially an emission peak at 380 – 405 nm in wavelength.

7. A chip-type semiconductor light emitting device comprising:

a substrate;

a pair of terminal electrodes that are placed on both ends of the substrate;

an ultraviolet ray light emitting element having at least two electrodes, the electrodes being electrically connected to the pair of terminal electrodes; and

a blue color converting layer, a green color converting layer and a red color converting layer that are stacked on the ultraviolet ray light emitting element in this order.

8. The chip-type semiconductor light emitting device according to claim 7,

further comprising a reflection case that is placed on an upper surface of the substrate so as to surround the ultraviolet ray light emitting element,

wherein the blue color converting layer, the green color converting layer and the red color converting layer are provided inside the reflection case.

9. A lead-type semiconductor light emitting device comprising:

a pair of leads;

an ultraviolet ray light emitting element which is placed on a bottom face of a recessed section formed on an upper end face of one of the paired leads, with a pair of electrodes thereof being electrically connected to the paired leads; and

a blue color converting layer, a green color converting layer and a red color converting layer that are successively formed on the ultraviolet ray light emitting element in a manner so as to cover the ultraviolet ray light emitting element.

10. The semiconductor light emitting device according to claim 9, wherein the blue color converting layer, the green color converting layer and the red color converting layer are placed inside the recessed section, and tip portions of the paired leads are sealed with a sealing member made of a light transmitting resin.

11. The semiconductor light emitting device according to claim 9, wherein the paired leads have tip portions sealed with a sealing member made of a light transmitting resin, and the blue color converting layer, the green color converting layer and the red color converting layer are formed on the

periphery of the sealing member.